REMARKS

In the Office Action dated January 9, 2004, claims 1-3, 5-7, 9-16, 18, 20, 23, 24, 26-33, and 35 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 5,754,831 (Berman); claims 8, 17, 19 and 21 were rejected under § 103 over Berman alone; claims 4, 27-29 and 31 were rejected under § 103 over Berman in view of the U.S. Patent No. 6,028,846 (Cain); claim 30 was rejected under § 103 over Berman in view of U.S. Patent No. 6,507,872 (Geshwind); claims 32, 34, and 36 were rejected under § 103 over Berman in view of U.S. Patent No. 6,665,271 (Thomas); and claim 37 was rejected under § 103 over Berman in view of Cain and Thomas.

Applicant respectfully submits that Berman does not disclose the subject matter of claim 1. The Office Action cited to column 8, lines 3-7, of Berman as teaching "combining the first performance parameters of respective components to derive overall first performance parameters." The cited passage in column 8 of Berman refers to calculation of a total transmission time st for a message 305 transmitted by a current source 345a. As further described in column 8 of Berman, the total transmission time st is determined by comparing a transmission timestamp 355 (which represents the time that the message 305 was introduced into network model 300) with a current timestamp 356. Berman, 7:37-38; 8:12-16. Note that the total transmission time st is derived by taking the difference between a transmission timestamp and a current timestamp--in other words, the difference between a time associated with introducing the message 305 into the network model 300, and a current time. The timestamp is associated with a message to represent a time at which the message traverses a particular point in the network model 300 of Berman,. In this case, there are two timestamps, an ingress timestamp and an egress timestamp. The timestamps disclosed by Berman do not constitute first performance parameters *of respective components of a communications systems*, where such performance parameters of respective components are combined to derive an overall first performance parameter.

The Office Action cited to the following passages of Berman as disclosing "deriving a quality indication of the communications system based at least on the overall first and second

performance parameters": column 7, lines 36-57; column 2, lines 46-48; and column 9, lines 7-20. The cited passage of column 7 refers to simulating transmission of a message 305 within the network model 300, segmentation of the message 305, and storage of a service time t and a utilization accumulator R*t associated with a network element 310. The column 7 passage notes that the service time t and utilization accumulator R*t are illustrative of transmission indicia of the network element 310. The transmission indicia are not a quality indication of *the communication system* derived from the overall first and second performance parameters. The passage at column 2, lines 46-48, of Berman cited by the Office Action refers to the simulated transmission generating a response time for transmitting a message through a network. The calculation of this response time is not based on overall first and second performance parameters. The passage at column 9, lines 7-20, of Berman cited by the Office Action refers to calculation of the average transmission time T. Applicant notes that the average transmission T was noted by the Office Action as corresponding to the act of combining second performance parameters of respective components to derive an overall second performance parameter. However, it appears that the same average transmission time T is also indicated as being the quality indication derived in claim 1. Such a reading is incorrect, as this reading would necessarily require that the average transmission time T of Berman be derived based on its self, which is an unreasonable reading.

In view of the foregoing, it is respectfully submitted that claim 1 is not disclosed by Berman.

Independent claim 20 is similarly not disclosed by Berman.

Independent claim 10 has been cancelled to render the rejection of the claim moot. Claim 35, which previously depended from claim 10, has been amended from dependent form, to independent form, with the scope of the claim remaining unchanged. Claim 35 is allowable over Berman for reasons similar to those of claim 1.

Independent claim 27 was rejected as being obvious over Berman and Cain. Even if the Berman and Cain references can be properly combined, the hypothetical combination of Berman

and Cain does not teach or suggest deriving a quality indication based on packet losses, packet jitters, and packet delays of plural components. As discussed above, Berman is concerned about calculating a total transmission time st and an average transmission time T. Applicant notes that the calculation of transmission time of Berman is not concerned at all with packet losses or packet jitters. Berman describes simulating transmissions of a message through a network model so that a transmission time can be calculated. Therefore, Berman has absolutely no need for packet loss and packet jitter parameters.

Although Cain refers to a simulator that takes into account packet loss and variable delay, the simulator of Cain is intended to perform a simulation based on user-entered packet loss and variable delay information. The simulator 26 processes packets of data according to the user-entered network conditions, with the results of the simulator analyzed for further development of the application. Cain, 5:52-57. This teaching, however, does not teach the derivation of a quality indication based on packet losses, packet jitters, and packet delays of plural components of a communications system. Therefore, the hypothetical combination of Berman and Cain fails to teach or suggest each or every element of clam 27.

Moreover, with respect to claim 28 (which depends from claim 1) neither Berman nor Cain teaches or suggests combining packet delays of respective components to derive *an overall packet delay*, and combining packet losses of respective components to derive an *overall packet loss*.

With respect to independent claim 29 (which depends from claim 28), neither Berman nor Cain teaches or suggests combining packet jitters of respective components to derive an overall packet jitter, and deriving a quality indication based on the overall packet jitter.

With respect to claim 31, which depends from claim 1, neither Berman nor Cain teaches or suggests assigning a signal loss parameter, an echo parameter, or a noise parameter to at least one of the components, where deriving the quality indication is further based on at least one of the signal loss parameter, echo parameter, and noise parameter. It is clear that neither Berman nor Cain even remotely suggests an echo parameter or a noise parameter. The Office Action

equated the packet loss parameter referred to by Cain as being the signal loss parameter. These two parameters are not equivalent. Signal loss is not the same as packet loss. Therefore, the hypothetical combination of Berman and Cain does not teach or suggest each and every element of claim 31.

Claim 30, which depends from claim 1, was rejected as being obvious over Berman and Geshwind. Applicant respectfully submits that the hypothetical combination of Berman and Geshwind does not teach or suggest the subject matter of claim 31. The Office Action cited to the abstract in column 16, lines 62-67, of Geshwind as teaching the subject matter added by claim 30. The abstract refers to procedures and systems for speeding up end-user access of large databases over communications networks. The abstract also refers to predicting user request by artificially intelligent assistant. The column 16 passage recited by the Office Action refers to reduced phoneme CODEC-oriented compression. However, there is no mention of assigning an audio CODEC type parameter to at least one of the components, and deriving the quality indication of the audio CODEC type parameter. Therefore, the hypothetical combination of Berman and Geshwind does not teach or suggest each and every element of claim 30. A *prima facie* case of obviousness has thus not been established with respect to claim 30.

Claim 8, which depends from claim 1, was rejected as being obvious over Berman alone. The Office Action conceded that Berman fails to disclose deriving a quality indication that includes calculating an E-model quality rating value. It is respectfully submitted that the calculation of transmission times (total transmission time or average transmission time) performed by Berman would not have led a person of ordinary skill in the art to modify the teachings of Berman for calculating an E-model quality rating value. There is simply no suggestion based on the teachings of Berman that would suggest the calculation of parameters other than a total transmission time or average transmission time. Therefore, a *prima facie* case of obviousness has not been established with respect to claim 8.

Claim 21, which depends from claim 20, is similarly allowable over Berman, which does not teach or suggest a controller to derive an E-model rating using stored models. A *prima facie* case of obviousness has not been established with respect to claim 21.

Claim 19 was also rejected as being obvious over Berman alone. Applicant respectfully notes that Berman does not contemplate at all the storage of a representation of a circuit-switched device. Berman is focused on a network that includes nodes, links, routers, bridges, gateways, switches, local area networks, and so forth. However, no mention is made whatsoever of including a circuit-switched device. Therefore, there is no motivation to modify Berman to include a circuit-switched device. A *prima facie* case of obviousness has thus not been established with respect to claim 19.

In view of the foregoing, allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0049US).

Respectfully submitted,

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